

543,044

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 August 2004 (19.08.2004)

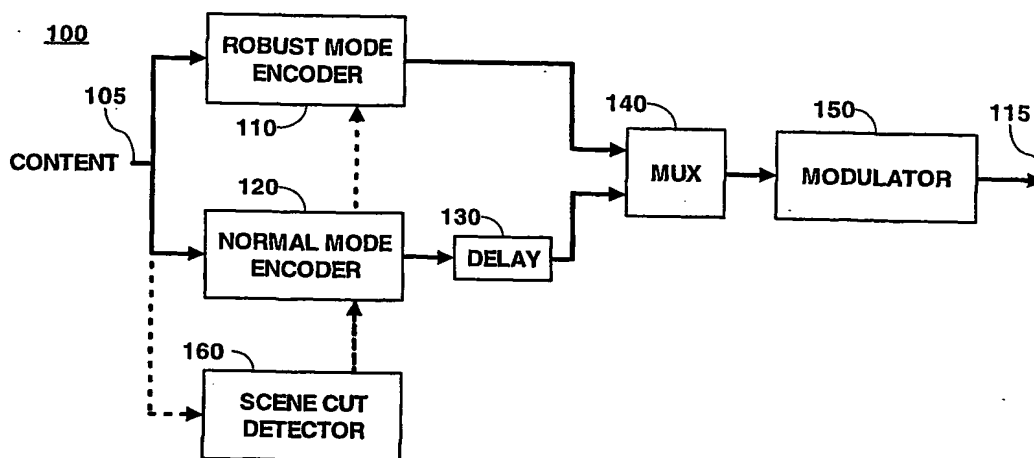
PCT

(10) International Publication Number
WO 2004/070986 A2

- (51) International Patent Classification⁷: **H04L**
- (21) International Application Number:
PCT/US2004/001583
- (22) International Filing Date: 20 January 2004 (20.01.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/443,672 28 January 2003 (28.01.2003) US
- (71) Applicant (for all designated States except US): **THOMSON LICENSING S.A.** [FR/FR]; 46, Quai A. Le Gallo, Boulogne 92648 (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **RAMASWAMY, Kumar** [IN/US]; 71 Sayre Drive, Princeton, New Jersey 08540 (US). **COOPER, Jeffrey** [US/US]; 11 Toth Lane, Rocky Hill, New Jersey 08553 (US). **BOYCE, Jill** [US/US]; 3 Brandywine Court, Manalapan, NJ 07726 (US).
- (74) Agents: **TRIPOLI, Joseph S.** et al.; c/o Thomson Licensing Inc., 2 Independence Way, Suite 200, Princeton, NJ 08540 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: ROBUST MODE STAGGERCASTING



(57) **Abstract:** A method and apparatus for staggercasting, encodes a first signal representing content and encodes a second signal representing the content using encoding relatively more robust than the encoding of the first encoded content representative signal. A composite signal including at least the first and second encoded signals is generated, in which one of the first and second encoded signals is delayed with respect to the other encoded signal. If an error is detected in the composite signal, then the undelayed encoded signal is decoded to reproduce the content. Otherwise, the delayed encoded signal is decoded to reproduce the content.

WO 2004/070986 A2



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.